PORTABLE PIANO **YPR-20**

Owner's Manual
Bedienungsanleitung
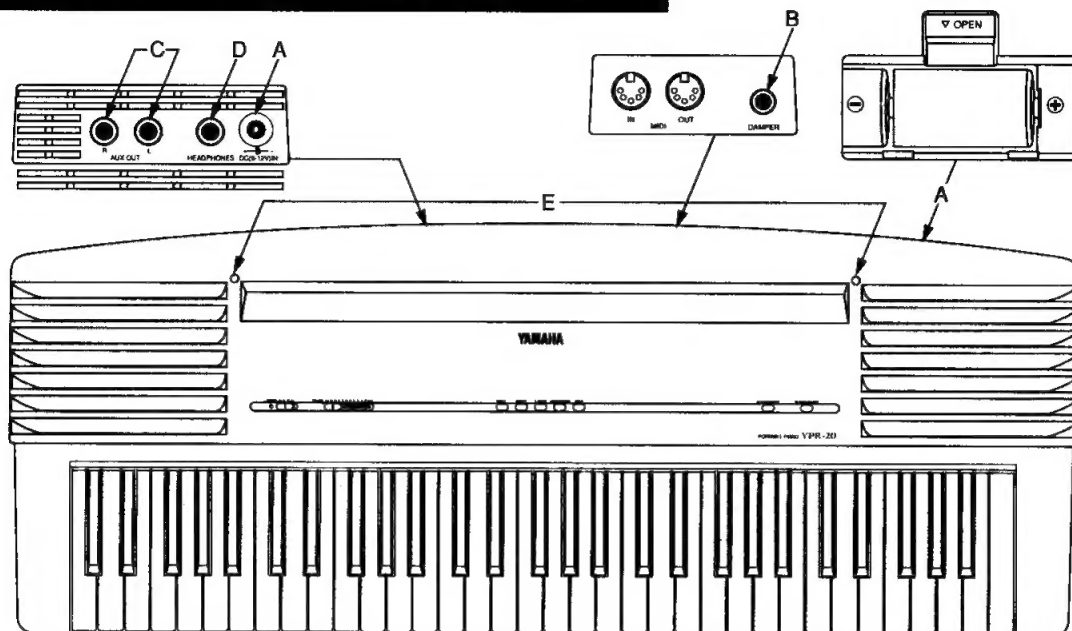*Mode d'emploi*
Manual del usuario

YAMAHA

Thank you for purchasing the YAMAHA YPR-20. The YPR-20 adopts AWM synthesis for its sound module. This progressive digital technology gives you the benefit of a fully natural range of sound. Please read this manual to learn how to best use and enjoy this excellent instrument in the years to come.

Contents

1. Getting Started

A. Power Source

The YPR-20 is powered by batteries, a power adaptor connected to household AC current, or by a car battery. (These are all optionally supplied.)

1) Using Batteries

Remove the Battery Compartment Cover on the bottom panel. Next put 6 batteries (1.5V SUM-1, D-cells, or R20) into the compartment, taking care battery polarity (+/-) is correct. Replace the cover.

Change all the batteries at the same time.

* Use only the batteries listed above. Do not use Ni-Cd or other kinds of batteries.

* Remove the batteries if the YPR-20 is not going to be used for a long period.

2) Using AC Current

This requires an optional AC power adaptor, PA-1, PA-1B, or PA-3 (YAMAHA). After making sure that the YPR-20 is turned off, connect the adaptor to the DC IN Jack on the rear panel of the YPR-20. YAMAHA will not be held responsible for any malfunction or damage caused by using other unauthorized adaptors.

3) Using a Car Battery

This requires the optional car battery adaptor CA-1 (YAMAHA). Refer to the CA-1's manual for a complete description on how to use it.

B. Connecting the Foot Switch

Connect the supplied Foot Switch to the DAMPER Jack on the rear panel. With this you can sustain a played sound.

C. Connecting Keyboard Amplifiers or a Stereo

For more volume connect the AUX OUT Jacks L/R of the YPR-20 to the inputs of the keyboard amplifiers, a stereo, or a similar device. When using a stereo connection cable as the PSC-3 (optional) with the PCP-1 adaptor (optional), connect them to the HEADPHONES Jack of the YPR-20.

D. Connecting Headphones

You can practice without disturbing your neighbors by connecting the headphones to the HEADPHONES Jack on the rear panel. This turns the internal speakers off.

E. Setting the Music Stand

Insert the ends of the supplied Music Stand into the 2 holes at the top of the front panel.

2. Playing

A. Basic Operation

Step 1
When all the required connections have been made, turn the POWER Switch ON. The POWER Indicator will light up.

Step 2
Select the sound you wish to play by pressing any of Voice Select Buttons.

* Voice PIANO 1 will be automatically selected when the YPR-20 is turned on.

Step 3
Adjust the volume with the VOLUME Control.

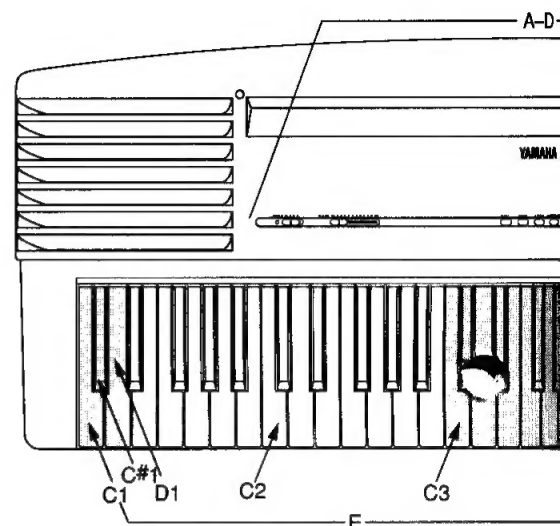* The VOLUME Control also adjusts the headphones' volume and the output level of the AUX OUT Jacks.

Step 4
Play the keyboard. The YPR-20 can output up to 12 notes at a time.

* When the supplied Foot Switch is connected, depress it with your foot and you can sustain the played sound as you would with a Damper Pedal when playing the piano.

B. Initial Touch Control
The YPR-20's keyboard is responsive to touch. Playing harder makes the sound louder and brighter and vice versa.

C. Demonstration Play
The YPR-20 has a demonstration song for each Voice (5 songs in total). To play this, do as follows:

Step 1
Press the DEMONSTRATION Button. The demonstration song for each Voice will be played in order from PIANO 1 to VIBES in repetition.
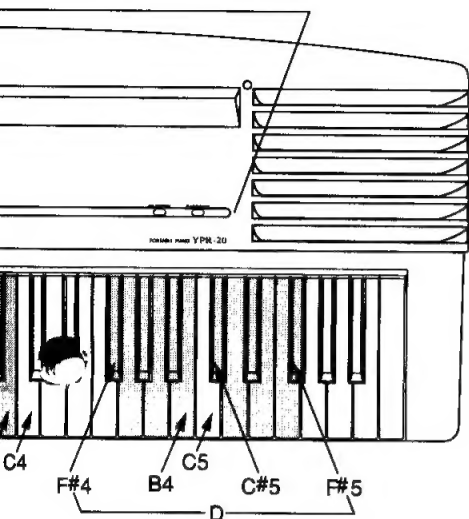
Step 2
To stop the performance, press the DEMONSTRATION Button again.

Step 3
When you wish to play the songs individually, first press any of the Voice Select Buttons and hold it down. Then press the DEMONSTRATION Button. The corresponding song will be played once. To stop it when being played, press the DEMONSTRATION Button again.

* During demonstration play, the YPR-20 will not respond to your play.

* The demonstration play will not be output as MIDI performance messages. Refer to the following pages for more information about MIDI.

C4 F#4 B4 C5 C#5 F#5

D

E. Fine Tuning Function

When you play the YPR-20 in an ensemble, it will be often necessary to tune it with the other instruments. This function is useful in such cases.

>> To make the pitch higher, press the C_1 and D_1 keys and hold them down. Then press any of the C_3 to B_3 keys. Each time a key is pressed the pitch will be changed by about a 4 cent step. The pitch can be adjusted up to 50 cents higher.

>> To make the pitch lower, press the C_1 and $C\#_1$ keys and hold them down. Then press any of the C_3 to B_3 keys. Each time a key is pressed the pitch will be changed by about a 4 cent step. The pitch can be adjusted up to 50 cents lower.

* To change to standard pitch, hold the C_1, $C\#_1$ and D_1 keys down, and press any of the C_3 to B_3 keys, or turn the unit off and then on again after a few seconds.

D.Transpose Function

This function allows you to play a certain melody or a phrase in a key different from the original key.

>> To change to a higher key, press the MIDI/ TRANSPOSE Button and hold it down. Then press any of the $C\#_5$ to $F\#_5$ keys.

Key	C#5	D5	D#5	E5	F5	F#5
Transposed Key	C#	D	D#	E	F	F#

>> To change to a lower key, press the MIDI/ TRANSPOSE Button and hold it down. Then press any of the $F\#_4$ to B_4 keys.

Key	F#4	G4	G#4	A4	A#4	B4
Transposed Key	F#	G	G#	A	A#	B

* In both these cases, the pitch is changed in 100 cent steps (a half tone). To recreate the original key, press the MIDI/TRANSPOSE Button and hold it down. Then press the C_5 key, or turn the POWER Switch OFF and then ON again after a few seconds.

3. MIDI

The YPR-20 is a MIDI-equipped keyboard. MIDI (Musical Instrument Digital Interface) is a worldwide standard for communicating performance information to and from electronic instruments and other electronic devices. With MIDI, the YPR-20 can control other MIDI-equipped instruments such as synthesizers or be controlled by them.
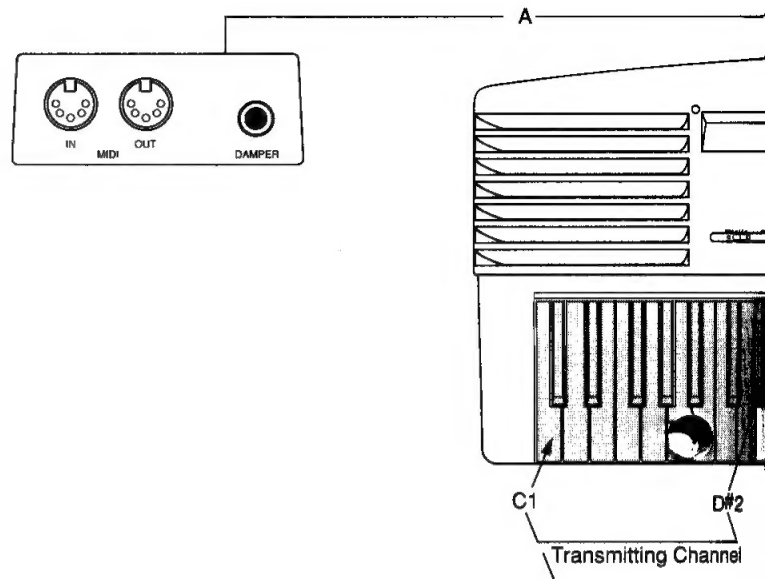
A. MIDI Connection

MIDI is basically a one-way communication. Connect it as follows:

>> To control the YPR-20 from another MIDI instrument, connect the YPR-20's MIDI IN Jack to another MIDI instrument's MIDI OUT Jack with a MIDI connection cable. In this case, the YPR-20 is a "Slave (receiver)".

>> To control another MIDI instrument from the YPR-20, connect the YPR-20's MIDI OUT Jack to another MIDI instrument's MIDI IN Jack with a MIDI connection cable. In this case, the YPR-20 is a "Master (transmitter)".

* In case you wish the YPR-20 and another MIDI instrument to control each other, you need bi-directional communication. Make two MIDI-OUT to MIDI-IN connections between these two machines with a couple of MIDI connection cables. In this case, both machines are simultaneously "Masters" and "Slaves".

Transmitting Channel

B. MIDI Channels

There are 16 channels for MIDI (MIDI channels: 1 to 16). Unless MIDI instruments are set to the same MIDI channel, they cannot communicate several kinds of MIDI information ("MIDI Channel Information") even if their MIDI connections are correct.

The YPR-20's MIDI channels for transmitting and receiving information are both automatically set to "1" when it is turned on. However, if required, these channels can be set with the following operation:

>> To set a MIDI transmitting channel, press the MIDI/TRANSPOSE Button and hold it down. Then press one of 16 keys from C_1 to $D\#_2$ to select the desired channel.

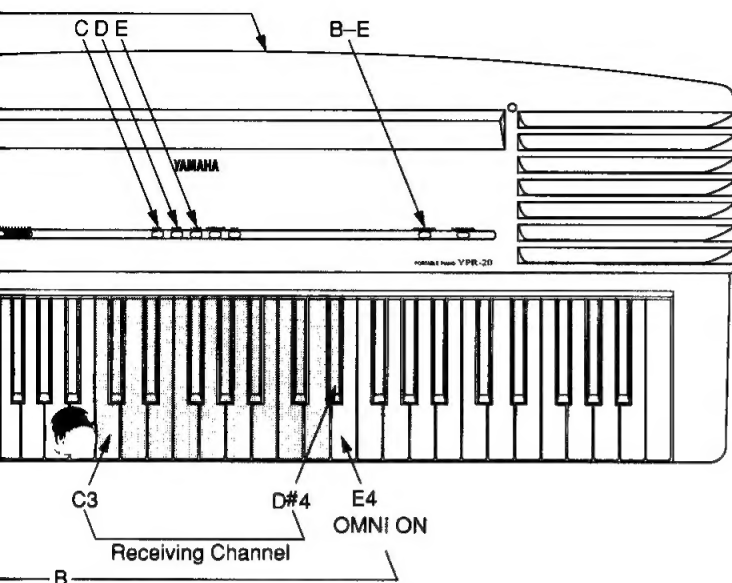| Key	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1	C2	C#2	D2	D#2
Transmitting Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

>> To set a MIDI receiving channel, press the MIDI/TRANSPOSE Button and hold it down. Then press one of 16 keys from C_3 to $D\#_4$ to select the desired channnel.

Key	C3	C#3	D3	D#3	E3	F3	F#3	G3	G#3	A3	A#3	B3	C4	C#4	D4	D#4
Receiving Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

* Morever, if required, the YPR-20 can be set to receive any kind of MIDI channel information (on channels 1 to 16). This status is called "OMNI ON".
To set the YPR-20 to this status, press the MIDI/TRANSPOSE Button and hold it down. Then press the E_4 key.

* Selecting a specific MIDI channel means that the machine is in "OMNI OFF".

C D E   B–E

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C3   D#4   E4
         OMNI ON
Receiving Channel

B

C. Local Control On/Off

Normally the YPR-20 sounds when you play a passage or a phrase on the keyboard, or changes tone when you select a Voice. This intuitively obvious status is called "Local Control On". However, the YPR-20 can be set to "Local Control Off" where its keyboard and internal sound module work independently.
You cannot control the internal sound module from the keyboard in "Local Control Off". What you play on the keyboard will be transmitted from the MIDI OUT Jack to a connected external MIDI instrument which will be controlled by the YPR-20.
Similarly, the YPR-20's internal sound module can also be controlled by a separately connected external MIDI device.

>> To set the YPR-20 to Local Control Off,
press the MIDI/TRANSPOSE Button and hold it down. Then press the Voice Select Button PIANO 1. Repeat the same operation once again, and the YPR-20 will be set to Local Control On.

* When the POWER is turned ON, the YPR-20 will be automatically set to Local Control On.

D. Cancelling the Program Change Message

The Program Change Message is a kind of MIDI Channel Information that is for selecting a sound program. Press a YPR-20 Voice Select Button to transmit a Program Change Message to an external instrument which is MIDI connected. It will receive the message and select the sound program corresponding to the specified number in the message. It is also possible for an external MIDI device to select the Voice of the YPR-20 with this message.
The YPR-20 can transmit and/or receive 5 Program Change Messages (as many as there are internal Voices). However, if not required, you can set the YPR-20 to cancel this message for both transmitting and receiving.

>> To cancel this Program Change Message,
press the MIDI/TRANSPOSE Button and hold it down. Then press the Voice Select Button PIANO 2. Repeat the same operation once again and the YPR-20 will transmit and receive this message.

* When the POWER is turned ON, The Program Change Message is automatically available.
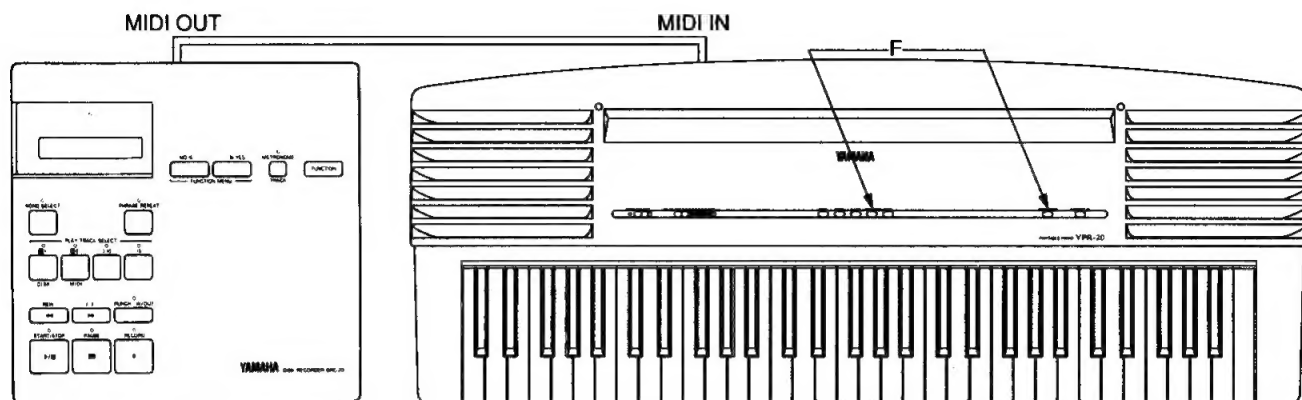
E. Cancelling the Control Change Message

Control Change Message is a kind of MIDI Channel Information for controlling the played sound. The YPR-20 uses this message mainly for transmitting and receiving the information of Damper Pedal effect by the Foot Switch. This means that you can add this effect to external MIDI instruments when the Foot Switch is connected to the YPR-20 and vice versa.
However, when you wish to cancel this message, do as follows:

>> To cancel this Control Change message,
press the MIDI/TRANSPOSE Button and hold it down. Then press the Voice Select Button E.PIANO. Repeat the same operation once again and the YPR-20 will transmit and receive this message.

* When turning the POWER Switch ON, The Control Change Message is automatically available.

F. Multi Timbre Function

Multi Timbre is a function of a special sound module. The sound module equipped with this function can be controlled by several MIDI channels and can sound several Voices at the same time. This means that you can easily make an ensemble sound with only one multi-timbral sound module. You do not need as many modules as there are parts in the ensemble you will perform.

Step 1

If you wish to use this Multi Timbre function of the YPR-20, first you need to connect a "Master" MIDI device which can control other external MIDI devices with different MIDI channels at the same time. Connect a MIDI master keyboard, MIDI sequencer, MIDI-equipped personal computer or the like.

Step 2

Next you have to activate this function. Press the MIDI/TRANSPOSE Button and hold it down. Then press the Voice Select Button HARPSICHORD. Repeat the same operation once again and the Multi Timbre function will be turned off.

When the YPR-20 is a "Slave" of one of these "Master" machines, it can play a 5 part ensemble with 5 internal Voices (up to 12 notes can be sounded simultaneously).

* In this case, the YPR-20's MIDI receiving channel should be set to any of 1 to 10.

* When the POWER is turned ON, the Multi Timbre function is not available.

Notes on MIDI

MIDI is a uniform standard for all MIDI-equipped instruments and devices. However specifications of MIDI instruments are not always the same. Making the MIDI connection is not enough. The MIDI devices must also have the same MIDI functions. When you wish to know about the functions of the MIDI instrument or device, refer to its MIDI Implementation Chart. The MIDI Implementation Chart for the YPR-20 is on the last page of this manual.

Maintenance

- Periodically wipe the cabinet clean with a soft cloth moistened with diluted soap solution, then wipe it with a dry cloth.
- Do not use chemically treated cleaning cloths on the unit or other chemicals like oil, solvents or insecticides.
- Do not expose the unit to direct sunlight, moisture or extremes in temperature.
- Do not put the unit on top of amplifiers, receivers or other heat sources, especially on the things with temperatures higher than 60°C (140°F).
- Place on a firm, level surface free of vibrations. Do not put anything on it.
- Keep the unit away from sources of strong magnetism.
- Do not place it in areas having excessive dust or humidity.
- Do not remove the unit's cover. You will risk electric shock. Refer all repairs to YAMAHA personnel.
- Using an unauthorized AC power adaptor may damage the unit.

YAMAHA is NOT responsible for damage caused by improper use.

Troubleshooting

Many "problems" can be solved quite easily. Refer to the following table before calling your YAMAHA dealer.

Problem	What To Do
• Power does not come on.	• Load batteries correctly. • Replace the batteries if dead. • If using an AC power adaptor, be sure it is firmly connected to both the DC IN Jack of the YPR-20 and the wall AC power outlet.
• Sound volume cannot be increased. Sounds cannot be sustained (held).	• Replace the batteries.
• No sound.	• Remove headphones plug if in. • Replace the batteries if dead.
• Distorted sound.	• Lower the volume.

Specifications

Keyboard	61 keys (C_1-C_6) with Initial Touch control
Voices	PIANO 1, PIANO 2, E.PIANO, HARPSICHORD, VIBES
Effects	DAMPER (sustain) Pedal with Foot Switch
Controls	POWER switch
	MASTER VOLUME
	MIDI/TRANSEPOSE button
	DEMONSTRATION button
Jacks	MIDI IN, MIDI OUT
	DAMPER (sustain)
	AUX OUT R, L
	DC IN
	HEADPHONES
Amplifier	2.5W x 1
Speakers	12cm (4-3/4") x 2 (4ohms)
Power Source	DC 9V
	(6 batteries, 1.5V SUM-1, R20 or D-cells)
	AC power adaptor PA-1, PA-1B or PA-3
	Car battery adaptor CA-1
Dimensions	931mm (W) x 362mm (D) x 123mm (H)
Weight	6.3kg (without batteries)
Accessory	Foot Switch, Music Stand
Optional Items	PA-1, PA-1B, or PA-3 AC power adaptor
	HPE-3 or HPE-5 lightweight dynamic headphones with extra-soft ear pads
	L-2 or L-4 keyboard stand
	PSC-3 stereo connection cord

(Some optional items may not be available in every region.)

YAMAHA reserves the right to make design and specification changes in the interests of product improvement without prior notice.

YAMAHA [Portable Piano]　　　　　　　　　　　　　　Date : 11/15 1989
　　　Model YPR-20　MIDI Implementation Chart　　　　Version : 1.0

Function		Transmitted	Recognized	Remarks
Basic　　Default		1	1	
Channel　Changed		1-16	1-16	
	Default	3	3	
Mode　　Messages		X	OMNI on, OMNI off POLY, MONO (M=1)	
Note		36-96	36-96	
Number : True voice		**************	36-96	
Velocity　Note on		O 9nH, v=1-127	O　v=1-127	
Note off		X 9nH, v=0	X	
After　　Key's		X	X	
Touch　　Ch's		X	X	
Pitch Bender		X	X	
Control	64	O	O	Damper
Change				
Program	0-4	O	O　　0-4	
Change　: True #		*************	0-4	
System Exclusive		X	O	
System : Song Pos		X	X	
: Song Sel		X	X	
Common : Tune		X	X	
System　　:Clock		X	X	
Real Time:Commands		X	X	
Aux　:Local ON/OFF		X	O	
:All Notes OFF		X	O　(122-125)	
Mes-　:Active Sense		O	O	
sages:Reset		X	X	
Notes :				

Mode 1 : OMNI ON,　POLY　　　Mode 2 : OMNI ON,　MONO　　　　O : Yes
Mode 3 : OMNI OFF, POLY　　　Mode 4 : OMNI OFF, MONO　　　　X : No

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